



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,507	09/05/2006	Jianjun Wang	047911-0103	2372

22428 7590 08/18/2010
FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

MEKHLIN, ELI S

ART UNIT	PAPER NUMBER
----------	--------------

1795

MAIL DATE	DELIVERY MODE
-----------	---------------

08/18/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Arguments

Applicant's arguments filed 7/26/2010 have been fully considered but they are not persuasive.

First, Applicant argues that one of ordinary skill in the art at the time of invention would not have had a reason to combine the teachings of Mack, Gao and/or Peigney. However, the Office Action makes clear that one of ordinary skill in the art at the time of invention would take the nanosheets taught by Mack and align them, as taught by Gao, so that they can be used in a flat panel display. Applicant argues that the Office Action does not state that the nanosheets stand on their edges vertical to a substrate. This is not persuasive because each end of the nanosheet is an edge and since the nanosheet is aligned on the substrate it is vertical to the substrate regardless of which edge it is aligned on, as taught by Gao. Accordingly, this argument is not persuasive.

Applicant further argues that Gao does not teach a nanosheet. However, the Office Action makes clear that Mack teaches a nanosheet and that Gao is relied upon merely to show the benefit of aligning said nanosheets. Therefore, Applicant's argument against the individual references is not persuasive as the rejection of the claimed invention is based on the references when considered as a whole and in combination.

Applicant further argues that when the method of nanotube production taught by Gao is combined with Mack, the nanosheets taught by Mack would be rendered unsatisfactory for their intended purpose. However, this argument mischaracterizes the rejection as stated in the Office Action. Gao, which deals with carbon nano-materials is

Art Unit: 1795

being relied upon solely to show the benefit of aligning such materials. Accordingly, when combined with Mack, one could use any technique to align the nanosheets to render them suitable for a flat panel display. With this in mind, Examiner notes that the claimed invention is a product claim that does not require that any particular technique be used to align the nanosheets. One of skill in the art at the time of invention would have appreciated that because the nanosheets are conductive, they can be aligned using an electric current after they are formed.

Applicant's argument regarding Shang is also not persuasive. Specifically, Applicant argues that Shang teaches away from individual nanoflakes because Shang teaches a configuration wherein the nanoflakes are interlaced. However, this argument is not persuasive because it simply points out the different intended uses of the respective products.

Finally, Applicant's argument with respect to Peigney's teachings is not persuasive because it is not supported by any evidence or explanation. Applicant simply asserts that the combination does not teach the claimed invention.

Therefore, for the reasons discussed above, the rejection is maintained.

/ELI S MEKHLIN/

Examiner, Art Unit 1795

/Jennifer K. Michener/

Supervisory Patent Examiner, Art Unit 1795